Final Report

V-89-[illegible]307

Top Management Program - Farm Management Initiatives

Funded by
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EXECUTIVE SUMMARY
Top Management Program - PROJECT # V-89-04-0307
March 23, 1992

Abstract

Cost Competitiveness is one of the major issues currently facing our agriculture industry. The first step in determining your cost competitiveness is to determine your own costs. The Top Management Program (TMP) uses a whole farm simulation computer program to determine actual Cost Of Production (COP) for each crop grown on a farm. In each of the last 3 years the TMP has calculated this COP for more than 130 farms representing over than 200,000 acres of Saskatchewan cropland. This individual COP information has been summarized and made available for use in both research and extension to assist on farm decision making.

Summary

This contact intended to supplement existing efforts within the Economics Branch of Sask. Agric. and Food in the area of COP data collection. Prior to this contract 90 to 100 farms were being surveyed to determine Cost Of Production (COP) for the major crops grown in Saskatchewan. In order to get better representation of on farm costs within the province the Agricultural Development Fund (ADF) was approached to provide additional funding to increase the number of farms sampled up to 130 farms. Project #V-89-04-0307 provided annual funding for a period of three years to be used in addition to the existing program.

The data was collected using a farm simulation model which breaks whole farm costs into detailed budgets for all the crops grown on the farm. The participating farmer gets intensive one to one counselling on the management of the farm operation, a projected income and expense statement for the year, and a detailed breakdown of the COP for each of the crops grown on the farm. In exchange for this the farmer provides his data to the program to be included in the data summaries. This process gives more detailed and accurate information than the farmer could provide on his own.

The main objective of this contract was to increase the number of farms surveyed in the TMP. The project goal was to determine actual farm COP figures for the major crops grown in the province and make this information readily available. The program calculated the COP on more than 130 farms representing over 200,000 crop acres in Saskatchewan in each of its three years. This information was summarized into COP statistics for each of the major crops grown in Saskatchewan. This information was made available for use in extension and research work both within the government and at the University.

In order for the agriculture industry to survive and prosper into the next century it must be able to compete globally, and react quickly and effectively to changes in the global market place. COP information provides the initial building blocks required to analyze the available alternatives and select the one most beneficial to an individual operation or to the industry as a whole.

FINAL REPORT TO AGRICULTURE DEVELOPMENT FUND

Top Management Program - Farm Management Initiatives

PROJECT v-89-04-0307

March 17, 1992

Abstract:

Cost Competitiveness is one of the major issues currently facing our agriculture industry. The first step in determining your cost competitiveness is to determine your own costs. The Top Management Program (TMP) uses a whole farm simulation computer program to determine actual Cost Of Production (COP) for each crop grown on a farm. In each of the last 3 years the TMP has calculated this COP for more than 130 farms representing over than 200,000 acres of Saskatchewan cropland. This individual COP information has been summarized and made available for use in both research and extension to assist on farm decision making.

Background and Objectives:

Information is required for all decisions which are made in the management of any type of business. In agriculture, especially Western Canadian Grains, there is no established method of getting this accurate and detailed information to base decisions on. This information is needed not only by the farmer but also by anyone advising farmers.

The Top Management Program (TMP) uses a forward planning computer model that allocates whole farm costs into detailed crop budgets. The programs provides the farmer with his detailed costs and a projection of his farm operation for the up coming year. This computer model also provides a system for selecting, averaging and analyzing information from a large number of farms based on specific areas and/or crops.

Through assistance from Saskatchewan Agriculture and Food a method of collecting and summarizing this information was developed. This method was first used with farmers in the spring of 1985 with 15 farms. The process was refined from 1986 to 1989 when 108 sets of farm data were summarized into Cost Of Production (COP) statistics.

The quality of the data collected was excellent but the representation of data was of concern. To overcome this concern the Agriculture Development Fund was approached to "top up" the funding in order to increase the number of farms to 130. It was felt that this would give a more representative sample of the agriculture industry. This larger sample size would enable reporting COP statistics for a larger area and allow more crops to be included in the summary.

The overall objective of the data collection process was to provide detailed and accurate information for on farm costs and returns. This information would be available on a regional basis and for the major crops grown in each region.

This data was to be used in extension publications and programs, and to assist in policy and research analysis.

Experimental Methods

In order to get the detailed information required for the TMP a lot of time and effort is required by the farmer. To get this commitment the farmer could either be paid for the data collection which means he is there for the money, or he must derive sufficient benefit from the process that it is worth his time. The first method described ends up being very expensive and the information collected may not be all that accurate. The TMP uses the second method in which we try to assist the farmer to make correct and accurate decisions for his own farm operation by doing forward planning of his farm operation. This process provides more accurate information than an outright purchase because the farm operator has a vested interest in providing the most accurate information.

The Top Management Program (TMP) uses a farm simulation program which takes whole farm costs and breaks them into per acre budgets based on the individuals own farm costs. This provides a very detailed breakdown of the farm costs while providing the cooperating farmer with a financial projection for the coming year. The participating farmer gets intensive one to one counselling on the management of his farm operation, a projection of income and expense for the upcoming year, and a detailed breakdown of his COP for each of his crops. In exchange for this he agrees to surrender his data to the program to be included in the data summaries.

The data collection process takes place through a series of three workshops held in various locations around the province. The first two meetings are designed to collect the information from the farmers. This data is then key-punched into the simulation program and the output is checked and sent to the participant. A final workshop is held in late February or early March. This final workshop is split into a morning session where current market conditions, government programs and other factors are discussed as well as going over the output tables from the simulation program. That afternoon or the following day each farmer spends 2 to 3 hours working individually with us correcting his data and doing forward projections for his farm operation.

Once the data has been collected it is then stripped of identification and put into a form which can be easily be summarized by the Economics Branch of Sask. Agric. and Food.
It is also used within the Economics Department of the College of Agriculture for their research and as a reference for some of their journal articles.

RESULTS

Over the period from 1987 to 1990 the COP for wheat in Saskatchewan has ranged from $3.09/bu to $7.24/bu with a mean value of $4.15/bu. The large variation in this COP is due mainly to yield fluctuations. We can also see that if our farm operations will have to adapt to the current market prices which are currently below this mean COP.

Our emphasis when working with farmers has shifted from "what **price** do I need to survive" to "what are my **costs** for producing my crop". This shift has occurred because there is more variability in the revenue received from a crop than the in the costs associated with growing the crop.

Our emphasis has also changed from one of long term stable planning to one of shorter term planning with attention on making a flexible plan. These changes have occurred because of the increased instability of markets and farm programs in agriculture.

The TMP has assisted many farmers in Saskatchewan in analyzing opportunities within their operation.

The Cost Of Producing Grain Crops In Saskatchewan, the yearly summary of the COP results, has enabled the extension staff to use "real" farm numbers in the delivery of their extension programs. This has also served as a bench mark for other operators to compare their farm operation to.

The data collected has enabled costs on Saskatchewan farms to be compared to our competitors in the United States.

It has provided a data set from which policy decisions and farm programs may draw on in order to determine their effect on Saskatchewan Agriculture.

It has educated both farmers and extension personnel in the area of COP and of the problems associated with attempting to define what exactly COP includes.

Conclusions

The Top Management Program has more that met its original objectives in that over 130 producers have participated in each of the three years representing crop budgets for over 200,000 acres of crop land in Saskatchewan. This data was summarized into bench mark data for the major crops has been made available to producers, extension personal and other interested parties.

This information has enabled farmers to make better decisions when analyzing alternative crops for their farms because they have had real farm data rather than some estimates to use in their budgets.

It has assisted extension personnel in their relations with the farm public by including real farm numbers in the various programs delivered.

Research personnel at the University of Saskatchewan have been able to make better forecasts on the impact of government policies on the agriculture industry.

The need for this information will continue to grow as each year brings along new factors which will affect the farm operation. As we look towards the future needs of agriculture the demand for detailed and accurate information on the industry will increase.

The more we know about the industry itself: the easier it will be to make the correct policy and farm level decisions, and the more accurately the industry will be able to respond to the changes in the future.

The future is steadily approaching whether we take steps to prepare for it or not. It is better to prepare for these changes than to hope they don't occur.

Impact on Saskatchewan Agriculture

Through the Top Management program the participants have been able to evaluate their farm operation under the new safety net programs rules which have been developed in the last two years.

Extension personal have incorporated this data into the education programs which it delivers in the agriculture community.

By focusing on costs rather than returns farmers have been able to make better management decisions on their farms, especially in these last few years of extremely unstable prices and incomes.

The COP information combined with some financial performance information is reported annually in **The Cost Of Producing Grain Crops In Saskatchewan** .

This information is also used in extension programs where actual farm costs are required. It is also used in analyzing policy decisions within the provincial department of agriculture.

Technology Transfer

The Farm Management Section, Economics Branch of Sask. Agricluture and Food publishes the following manual each year that the TMP has ran. The Cost of Producing Grain Crops In Saskatchewan 1990, 1991, 1992.

Detailed information for specific regions has been summarized and distributed to regional Farm Management Specialists as requested.

The data collected has also been cited as a reference for many of the journal articles coming out of the Agricultural Economics Dept of the College Of Agriculture. Some of these articles are listed below.

An Economic Evaluation of Alternative Crop Leases.

The Long-Run Financial Effects of Improved Grain Handling System Efficiency on Individual Saskatchewan Grain Producers.

An Analysis of Yield-Price Risk Associated with Specialty Crops.

US versus Saskatchewan Cost Of Producing Wheat.

Personnel

	Months	Time
Tom Thorson	16.5	70%
Les Anderson	15	80%
Robert Wallace	15	75%
Dean Sawatzky	9	75%
Russell Schwehr	9	75%

Equipment

There was no equipment valued over five hundred dollars purchased with these funds.